

# Inspiring Future Program Evaluators through Innovative Curriculum for Undergraduates

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**Abstract:** Instruction in program evaluation is challenging given the inherent interdisciplinary nature of the field. As well, there is no one discipline typically dedicated to evaluation training, and few formal programs and university course offerings exist. Despite these limitations, training and education at the postsecondary level continues to be vital in supporting the professionalization of program evaluation, especially as it is a requirement for credentialing. The current article presents an innovative project comprising both education and hands-on training of program evaluation practices for undergraduate students. The project involved in-class lectures targeting specific program evaluation competencies and a program evaluation assignment in an upper-level undergraduate psychology course. Students were asked to develop a logic model and identify psychometrically sound evaluation measures based on an existing community organization's program or on a theoretical example. At the end of the course, students ( $N = 58$ ) completed surveys to assess their achieved evaluation competencies and experience with program evaluation. Overall, students gained evaluation-specific skills and knowledge, and the assignment was successful in promoting interest in program evaluation as a discipline. It is our hope that the current project can support faculty to integrate program evaluation in engaging and meaningful ways into their own curriculum.

**Keywords:** community-engaged learning, education, program evaluation, training, undergraduate students

**Résumé :** La formation en évaluation de programme est difficile étant donné la nature interdisciplinaire inhérente du domaine. De plus, il n'existe pas de discipline qui se prête particulièrement à la formation de l'évaluation; il existe cependant quelques programmes officiels et plusieurs universités offrent des cours dans le domaine. Malgré ces limites, la formation au niveau postsecondaire est nécessaire pour soutenir la professionnalisation de l'évaluation de programme, surtout si l'on vise une accréditation. Le présent article présente un projet novateur comprenant à la fois un enseignement et une formation pratique en matière d'évaluation de programme pour des étudiants de premier cycle. Dans le cadre d'un cours avancé en psychologie, plusieurs cours magistraux ciblant des compétences spécifiques en évaluation de programme

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*ainsi qu'un exercice concret furent proposés aux étudiants. Les étudiants ont été invités à élaborer un modèle de logique de programme. Ensuite, on leur a demandé d'identifier les mesures d'évaluation psychométriques basées soit sur le programme d'une organisation communautaire, soit sur un exemple théorique. À la fin du cours, les étudiants (N = 58) ont répondu à un questionnaire afin de jauger leurs connaissances dans le domaine; on leur a aussi demandé d'évaluer leur expérience du volet en évaluation de programme. Dans l'ensemble, les élèves ont démontré qu'ils avaient acquis des compétences et des connaissances spécifiques en évaluation. De plus, le sondage a révélé que le cours avait réussi à promouvoir un intérêt pour l'évaluation de programme en tant que discipline. Cette expérience démontre qu'il est possible d'intégrer l'évaluation de programme et d'éveiller l'intérêt dans la discipline dans des cours de premier cycle en utilisant des stratégies d'engagement.*

**Mots clés :** organisation communautaire, instruction, évaluation de programme, formation, étudiants de premier cycle

## INTRODUCTION

Program evaluation, as a discipline, continually strives to position itself within the broader professional landscape. Training programs and preservice education play a critical role in maintaining the professional and ethical standards of the evaluation profession (LaVelle & Donaldson, 2010). Further, training programs help ensure evaluators are provided with the specific skills and knowledge required to provide quality evaluation services (LaVelle & Donaldson, 2010). Unfortunately, despite efforts to professionalize the practice of evaluation, training opportunities in Canada remain limited and are largely restricted to graduate-level programs. In a recent cross-Canada review of graduate-level programs and courses in evaluation by the Consortium of Universities for Evaluation Education (CUEE), only eight evaluation programs were identified across major Canadian postsecondary institutions (McDavid & Devine, 2009). Two evaluation concentrations were also identified within non-evaluation programs. An additional 17 institutions were identified as offering graduate-level evaluation courses; however, the average number of courses offered per institution is 2.5, and the majority of these were offered through schools of public administration.

Program evaluation training is even more limited at the undergraduate level. Few evaluation courses exist, and those offered are often buried inside broader disciplines such as social work, nursing, and psychology. Efforts to introduce program evaluation as a distinct discipline at the undergraduate level in a range of disciplines would not only encourage students to seek out further evaluation training opportunities, but make program evaluation more visible and accessible as a profession. Introducing evaluation training at the undergraduate level would be particularly useful in helping students identify their interests for graduate studies, thereby providing the precursor to the necessary foundation for credentialing.

One challenge that arises is how to ensure that students at the undergraduate level are sufficiently exposed to program evaluation, given that so few universities

offer dedicated courses focused on program evaluation. In this article we present an innovative project that exposed undergraduate students to program evaluation through in-class lectures and hands-on experience using partnerships with existing community organizations. The goal of the project was to provide students with early hands-on experiential activities in the field of program evaluation in an attempt to pique their interest in pursuing evaluation either at the graduate level or as a potential career.

## COMMUNITY-UNIVERSITY COLLABORATION FOR PROGRAM EVALUATION AT RYERSON UNIVERSITY

Ryerson University has a long-standing tradition in applied learning education. Further, a recent focus on experiential learning at both the university level ([Office of the Provost and Vice President Academic, 2014](#)) and through the [Ministry of Training, Colleges, and Universities \(2014\)](#) has resulted in a growth of infrastructure for Community-Engaged Learning and Teaching (CELT) within the university. Consequently, Ryerson faculty are given the institutional encouragement and support needed to include community-engaged curricular and co-curricular activities. Further, found within the broader increase of support for community-engaged learning is also support for community-centred program evaluation. For example, Ryerson University now offers nine undergraduate courses, four graduate courses, and three certificate programs addressing program evaluation. Ryerson University became a member of the Consortium of Universities for Evaluation Education in 2014.

Given Ryerson University's advancement toward CELT, the current in-class program evaluation project was based on the CELT model of the Academic Service Learning framework, which defines CELT as "an educational approach that integrates service in the community with intentional learning activities" (Canadian Alliance for Service Learning, n.d.). In this case, it was a course-based project where students could choose to participate in an organized service activity that met identified community needs. Further, activities were designed to support students to gain a greater understanding of course content and an enhanced sense of personal values and civic responsibility ([Bringle & Hatcher, 1995](#), p. 112).

## THE CURRENT PROJECT

The project took place in a Community Psychology class and required all students to evaluate a specific program. The undergraduate class was attended by students from a range of disciplines, including psychology, nursing, criminal justice, early childhood education, social work, arts and contemporary studies, politics, nutrition, and sociology. The program evaluation assignment comprised two phases: (a) development of a logic model for their program, and (b) indicator review for one core outcome. Students received feedback on Phase 1 before commencing the indicator review; this ensured that a proper understanding of the program was

achieved before researching measurement options for outcomes. Students were given the option of basing their assignment on one of two hypothetical programs provided by the instructor (Regular Option [RO];  $n = 34$ ) or on an existing program at one of three partnering community organizations (Community-Engaged Option [C-EO];  $n = 23$ ). The three community organizations were Hong Fook Mental Health Association, Progress Place, and Renascent. Hong Fook is an ethno-specific mental health agency that assists newcomers from the Asian community with clinical and holistic health services. Students based the assignment on a workshop series aimed at increasing cultural sensitivity across community services in Ontario. Progress Place provides holistic psychosocial rehabilitation for individuals with severe mental illness and cognitive disability. Students based the assignment on the service model (nonhierarchical) and evaluated its effectiveness in improving their clients' quality of life. Lastly, Renascent provides addiction treatment and support services for individuals, families, and workplaces through a range of programs. Students based the assignment on the Renascent Contacts Program, which provides individuals in recovery with peer support. Prior to choosing an assignment option, all students attended a course lecture where each community organization had the opportunity to present their organization's mission and the existing program to be evaluated. After attending these presentations, students voluntarily chose to complete the RO or C-EO assignment.

*Targeted program evaluation competencies.* It was important for students to deliver evaluations guided by the evaluation competencies set forth by the Canadian Evaluation Society (CES, 2014). The course instructor identified technical practice, interpersonal practice, and situational practice as the most relevant core competencies for students, given the nature of the assignment. These competencies were woven into the overall course curriculum to ensure seamless exposure. Technical practice was addressed through two course lectures specifically on program evaluation and assigned reading (Shackman, 2010). As prerequisite to the current course, students had all taken an introductory course in psychology where they were taught the basics of research design: specifically, scientific method (e.g., falsifiable), basic experimental design (independent and dependent variables), causation vs. correlation, control groups, operationalization of variables, confounding variables, and basic coverage of reliability and validity. To complement this presumed previous knowledge, students were introduced to program evaluation lecture content, assigned reading, assignment, in-class scenarios, reflective questions, and small group discussions. Content included definition of evaluation, logic models and components, causality requirements, basic experimental principle, different study designs (nonexperimental, quasi-experimental, and experimental), control vs. comparison groups, different data sources (administrative data, survey, key informant interviews, focus groups), and critical appraisal of different sources.

Interpersonal practice was addressed by the evaluation assignment itself; all students were given the opportunity to develop the interpersonal skills necessary for program evaluation by working in groups and collaborating with community

**Table 1.** List of Domains Targeted by Program Evaluation Training and Corresponding Instruction Method

Domain	Competence	Method of Instruction/Exposure
Technical practice	2.2 Specifies program theory	2 multiple-choice questions on logic models Assignment
	2.3 Determines the purpose for the evaluation	1 multiple-choice question
	2.5 Frames evaluation questions	Assignment
	2.6 Develops evaluation designs	Free-response questions
	2.7 Defines evaluation methods (quantitative, qualitative, or mixed)	2 scenario-based multiple-choice questions
Situational practice	3.1 Respects the uniqueness of the site	Stakeholder meeting/agency visits
Interpersonal practice	5.6 Uses facilitation skills (group work)	Group assignment
	5.8 Uses collaboration/partnering skills	Stakeholder meeting/agency visits
	5.9 Attends to issues of diversity and culture	Stakeholder meeting

partners. For example, students had to develop and implement a list of group work principles and provide evaluation of their group members' contributions. Situational practice was only addressed for C-EO students because only they attended a stakeholder meeting. The purpose of these meetings was to give C-EO students an opportunity to engage with the community partners in a dialogue regarding the specific program under evaluation. C-EO students were also required to learn about the mission and clientele of each community organization to garner enough information to produce a thorough evaluation. This was accomplished through site visits, in-person meetings, and document analysis. Table 1 presents the domains of evaluation and instruction methods.

## METHOD AND RESULTS

Two evaluation measures were used: (a) evaluation competence and self-perceived competence (Evaluation); and (b) community engagement and learning enhancement (Engagement). The Evaluation measure involved an in-class survey with students from both assignment streams (C-EO and RO). A total of 57 (23 C-EO students and 34 RO students) completed the Evaluation paper survey

in-class.<sup>1</sup> The Engagement measure involved an in-class survey, developed and administered by the CELT Office, completed by 24 students in the C-EO stream. The response rate for the C-EO group was 64% for the Evaluation measure and 68% for the Engagement measure. Response rate for the RO group was 37% for the Evaluation measure. The low response rate was due largely to low class attendance; on the day the survey was conducted, however, nearly every student who was in class did complete the survey.

Table 2 records the proportion of students in each group (C-EO and RO) who reported a minimal level of achievement of the core evaluation competencies. Overall, students working with a partner community organization were exposed to a broader range of evaluation knowledge and skills. Students' interaction with community partners through stakeholder meetings facilitated a greater uptake of competencies as compared to students who chose the RO. Also included in

**Table 2.** Proportion of Students Achieving Core Evaluation Competencies

	Competency	Assessment Method	C-EO (%)	RO (%)
Technical practice	2.2 Specifies program theory	2 multiple-choice questions on logic models Assignment grade	95	70
	2.3 Determines the purpose for the evaluation	1 multiple-choice question	50	65
	2.5 Frames evaluation questions	Assignment grade	95	70
	2.6 Develops evaluation designs	Free-response questions	43	32
	2.7 Defines evaluation methods	2 scenario-based multiple-choice questions	95	70
Interpersonal practice	5.6 Uses facilitation skills (group work)	Self-efficacy rating	100	100
	5.8 Uses collaboration/partnering skills	Self-efficacy rating	70	N/A
	5.9 Attends to issues of diversity and culture	Self-efficacy rating	70	N/A
Situational practice	3.1 Respects the uniqueness of the site	Self-efficacy rating	70	N/A

*Note.* C-EO refers to students who completed the community-engaged option; RO refers to students who completed the regular option. Percentages for Technical Practice indicate the proportion of students who had the correct response or received a perfect grade on that portion of the assignment. Percentages for Interpersonal Practice and Situational Practice indicate the proportion of students who reported at least moderate agreement (minimum of 4 on a 5-point scale) with statements assessing self-efficacy in each domain.

the Evaluation survey were items pertaining to interest in evaluation (e.g., *I am interested in learning more about program evaluation*). Results found no differences between groups (C-EO vs. R-O) in terms of program evaluation interest, suggesting that interest in evaluation was independent of group assignment. This result further suggests that interest in program evaluation can be achieved through course lectures and hypothetical assignments; therefore, instructors with limited community resources could still integrate program evaluation into their course curriculum.

The Engagement measure included items assessing community engagement, integration of theory and practice, connection with community, and enhanced learning as a result of the community-engaged assignment format. Responses were overwhelmingly positive in terms of impact in these areas (see Table 3). Qualitative responses were also garnered in the evaluation of the community engagement. When students were asked about the knowledge and skills gained in this approach the project, they reported: “[I] learned about program evaluation and how to apply to real-life situations,” “Organizational skills. The logic model helped me understand how there is a process for long-term outcomes to have as they correlate to resources, activities, and much more,” and “The research skill, a general sense of program evaluation, logic model.”

**Table 3.** Response to the Community Engagement Measure

Item	Percentage Indicating Agree or Strongly Agree
“Participating in CELT provided opportunities to apply the theories and concepts I learned to practical problems and/or new situations”	96
“Participating in CELT provided opportunities to . . . [I]earn about and/or strengthened my skills in inquiry, observation, and description”	96
“Participating in CELT provided opportunities to . . . [I]earn about social issues in the Greater Toronto Area and how they affect people in the community and on campus”	96
“Participating in CELT provided opportunities to . . . [I]earn about and/or strengthened my skills in analytical/critical thinking”	91
“Participating in CELT provided opportunities to . . . [s]trengthen my interpersonal skills such as team work, problem-solving, and collaborative decision-making”	91
“Participating in CELT provided opportunities to . . . [I]earn how my degree program is applicable to the real world”	87.5

At the conclusion of the course, the course instructor presented the highest-quality logic model and indicator review (with the highest scores) to the three community partners in a brief meeting. This time was used to provide clarity on the project results, as well as provide initial guidance to the community partners on how best to proceed. They were encouraged to review the logic models and indicators as a starting point for their future plans. As the course instructor was already partnered with two of the three community agencies, there was an existing relationship upon which to explore implementation of the logic models and evaluation plans. This process ensured that even though the students had limited training in evaluation, community partners were apprised on the best-quality assignments and had a contact and implementation plan in place to pursue future work in an ethically sound manner.

## LESSONS LEARNED

Exposure to program evaluation knowledge and practice can be done in a progressive manner. Although content was mapped on competency domains, and results presented accordingly, we do not suggest that competency was fully achieved in those domains by the end of this semester-long course. Rather, we view this as a preliminary exposure, which can be strengthened over time with repeated and sequential curriculum-based exposure at both the undergraduate and graduate levels. Our goal was to establish an interest in program evaluation among students, and this has been accomplished through curriculum employing more traditional assignment formats and through community-engaged learning and teaching. Overall, this project has affirmed the idea that program evaluation training and education can be delivered at an undergraduate level. In the future, we seek to strengthen the evaluation design of this project by assessing baseline knowledge and exposure and ideally conducting prospective, longitudinal work to better ascertain the impact of early exposure. This work would be complemented well by including program evaluators in the typical “Career Week” presentations, for example.

One of the greatest lessons learned, albeit a confirmation of earlier suggestions to the fact, was the eagerness and willingness of community partners to collaborate on this project. This speaks directly to their current fiscal challenges in conducting evaluation, as well as their capacity and resources to undertake evaluations. For one community partner, this project emerged at the early stages of accreditation and was an inceptor of the evidence-based movement within the organization. Such a collaboration is a superb way to provide service to the local community, something that academic institutions value and seek to foster in students, staff, and faculty.

The challenges of administering an evaluation within a course should not go unrecorded. This posed several ethical challenges around how best to ensure that students felt respected and valued, and not coerced into participating. A collaboration with the CELT coordinator (a co-investigator role, with no relationship to



students) was a successful approach to mitigating any concerns. As well, the project benefitted from a dedicated part-time research assistant and engaged teaching assistant who were able to undertake much of the coordination with community partners, as well as data entry and management. Their involvement was valuable to the project, and also had the ripple effect of exposing them to program evaluation. It was arguably quite successful, as the teaching assistant went on to secure a part-time position in a well-respected, hospital-based evaluation unit. Greater consideration and assessment of students' interest and skill in program evaluation warrants further attention, in particular, assessing if any students had pre-existing knowledge in program evaluation from other courses.

This pilot project also contains a couple of limitations that should be considered when interpreting the results. The measures of students' knowledge and interest in program evaluation were largely based on self-report, which has several limitations (Gonyea, 2005). Although we attempted to offset this through examination of their grade on the assignment, this fails to fully address such limitations. As well, the low response rate for the Community Engagement Measure warrants caution in interpreting those results. Moving forward, the CELT Coordinator is exploring online versus paper surveys, as well as different strategies for when to conduct the survey to increase the response rates (Sax, Gilmartin, & Bryant, 2003).

## CONCLUSIONS

This pilot project to expose undergraduate students to program evaluation, through in-class lectures, assignments, and community-engaged learning and teaching, represents an innovative way to interest and inspire students in the discipline. Preliminary results indicate interest was piqued and preliminary levels of competence were achieved in certain domains. The community-engaged collaboration offers a novel way to provide hands-on training, establish meaningful connections to community organizations, and provide a community service.

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## NOTE

- 1 The project underwent Research Ethics Board review and was deemed by the Ryerson University REB to be considered an evaluation project. A consent form and process was used, and students were provided a \$5 gift card to Tim Horton's to thank them for their participation.

## REFERENCES

- Bringle, R. G., & Hatcher, J. A. (1995). A service-learning curriculum for faculty. *Michigan Journal of Community Service Learning*, 2, 112–122.
- Canadian Alliance for Service Learning. (n.d.). *Definitions*. Retrieved from [http://www.communityservicelearning.ca/en/welcome\\_definitions.htm](http://www.communityservicelearning.ca/en/welcome_definitions.htm)
- Canadian Evaluation Society. (2014). *Competencies for Canadian evaluation practice*. Retrieved from [http://old.evaluationcanada.ca/site.cgi?s=50&ss=8&\\_lang=en](http://old.evaluationcanada.ca/site.cgi?s=50&ss=8&_lang=en)
- Gonyea, R. (2005). Self-reported data in institutional research: Review and recommendations. *New Directions for Institutional Research*, 2005(127), 73–89. <http://dx.doi.org/10.1002/ir.156>
- LaVelle, J. M., & Donaldson, S. I. (2010). University-based evaluation training programs in the United States 1980–2008: An empirical examination. *American Journal of Evaluation*, 31(1), 9–23. <http://dx.doi.org/10.1177/1098214009356022>
- McDavid, J., & Devine, H. (2009). *Consortium of Universities for Evaluation Education (CUEE) project: Research on evaluation education at the graduate level in Canadian universities*. Final Report.
- Ministry of Training, Colleges, and Universities. (2014). *Strategic Mandate Agreement (2014–17): Between the Ministry of Training, Colleges, and Universities & Ryerson University*. Retrieved from <http://www.tcu.gov.on.ca/pepg/publications/vision/universities.html>
- Office of the Provost and Vice President Academic. (2014). Ryerson University: Our time to lead: Academic Plan 2014–2019. Retrieved from [http://www.ryerson.ca/senate/agenda/2014/Academic\\_Plan\\_Draft\\_Full\\_June\\_3\\_14.pdf](http://www.ryerson.ca/senate/agenda/2014/Academic_Plan_Draft_Full_June_3_14.pdf)
- Sax, L. J., Gilmartin, S. K., & Bryant, A. N. (2003). Addressing response rates and nonresponse bias in web and paper surveys. *Research in Higher Education*, 44(4), 409–432. <http://dx.doi.org/10.1023/A:1024232915870>
- Shackman, G. (2010). *Program evaluation: A beginner's guide*. Retrieved from <http://gso-ciology.icaap.org/methods/>

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